# Attributes

* departmentName
* departmentAbbrevation
* programmeName
* programmeAbbrevation
* branchName
* studentName
* studentIDNbr
* studentLoginID
* courseCode
* courseCredits
* courseName
* courseCapacity
* courseCategory
* placeInQueue
* grade
* coursePrerequisites

**departmentName -> departmentAbbrevation**

**departmentAbbrevation -> departmentName**

Violating 3NF. But departmentAbbrevation and departmentName cannot be both part of the key so departmentName will still be the key but departmentAbbrevation is unique.

**programmeName -> programmeAbbrevation**

The name of the programme will be shortened to a abbrevation. A programme will have a unique name but the abbrevation is not neceraily unique.

**studentLoginID -> programmeName branchName studentName studentIDNbr**

Does not violate any normalforms. studentLoginID is a key and so is programmeName and branchName, the rest are nonkeys.

**studentIDNbr -> studentLoginID**

Violates 3NF but studentIDNbr is unique in a higher sense than studentLoginID. We cannot edit the value of a studentIDNbr but we can choose the value of studentLoginID which will also be unique at the university and is choosen from the students name and/or ID number. (Two students cannot have identical usernames). If we add the fact that passing unisserarily around a persons ID number around on the internet question of privacy we chose to have studentLoginID as a key and the studentIDNbr as unique.

**studentLoginID courseCode -> grade**

Does not violate any normalforms. Looks identical to the ”Completed” relationship in our schema.

**courseCode -> courseName courseCredits courseCategory courseCapacity**

Does not violate any normalforms. courseCode is a key and the rest are nonkeys.

**courseCode placeInQueue -> studentLoginID**

**studentLoginID courseCode -> placeInQueue**

Does not violate any normalforms. Proves that given a place in the queue and a course code we will know who holds that spot in the queue and that only one student can hold it. This is because given a studentLoginID and a courseCode we get where in the queue the student is for the specific courseCode.